ODS 5120

OBSTRUCTION DATA SHEET

ODS 5120
HAWTHORNE MUNICIPAL AIRPORT
HAWTHORNE, CALIFORNIA

DIGITIZED FROM

OC 5120
SURVEYED JANUARY 1989
6TH EDITION

PREPARED AND DISTRIBUTED BY
THE NATIONAL OCEAN SERVICE
U.S. DEPARTMENT OF COMMERCE
FOR THE FEDERAL AVIATION ADMINISTRATION

C55.411/3:

OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)

2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).

3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) ..... Utility runway - visual approach only
A(NP) .... Utility runway - nonprecision instrument approach
B(V) ..... Nonutility runway - visual approach only
C .... Nonutility runway - nonprecision instrument approach with visibility minimums greater than 3/4 mile
D .... Nonutility runway - nonprecision instrument approach with visibility minimums as low as 3/4 mile
PIR ..... Precision instrument runway
SUPLC ... Supplemental C underlying a B(V)

FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.

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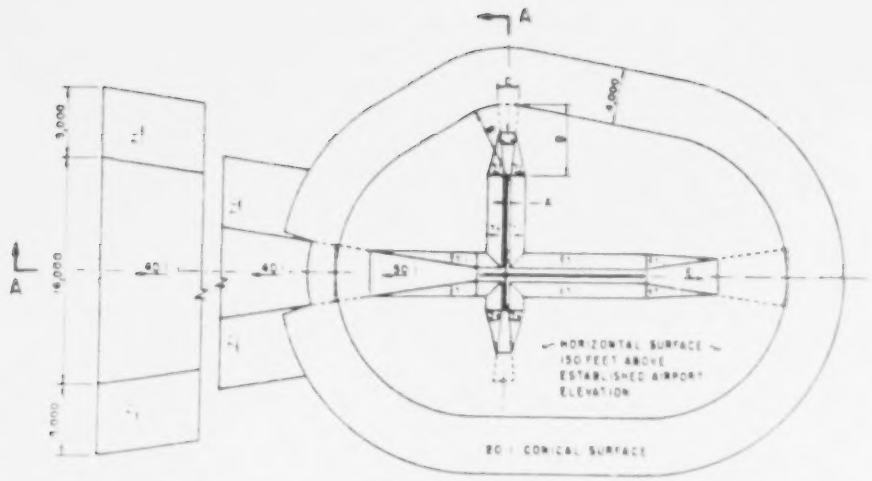
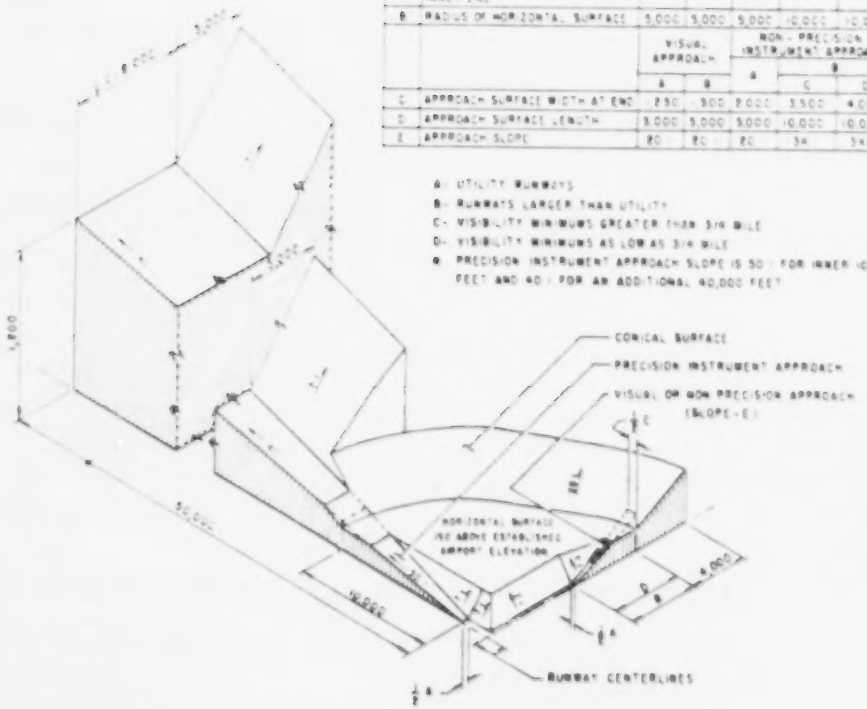


DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	B C	B D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	500	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	B C	B D	
C	APPROACH SURFACE WIDTH AT END	250	500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	*
E	APPROACH SLOPE	20	20	20	34	34	*

A - UTILITY RUNWAYS
B - RUNWAYS LARGER THAN UTILITY
C - VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
D - VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT
IMAGINARY SURFACES

ANNOTATION OF ODS DATA FORMAT

OC XXXX

AIRPORT ELEVATION XXXX

X[1] X[2] XXXX/XXXX[3] XXXXXX.XXX[4] XXXXXXX.XXX[4] XXXXXXX[5] XXXX/XXXX[6] XXXXXX.XXX[7] XXXXXXX.XXX[7]

OBJECT	LAT	LONG	A[8]	ELEV[9]	AGL[10]	HAR[11]	HAT[11]	HAA[11]	DEND[12]	DTHR[12]	DCLN[12]	PNTR[13]
XXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXX	XXXXXX.XXX	XXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

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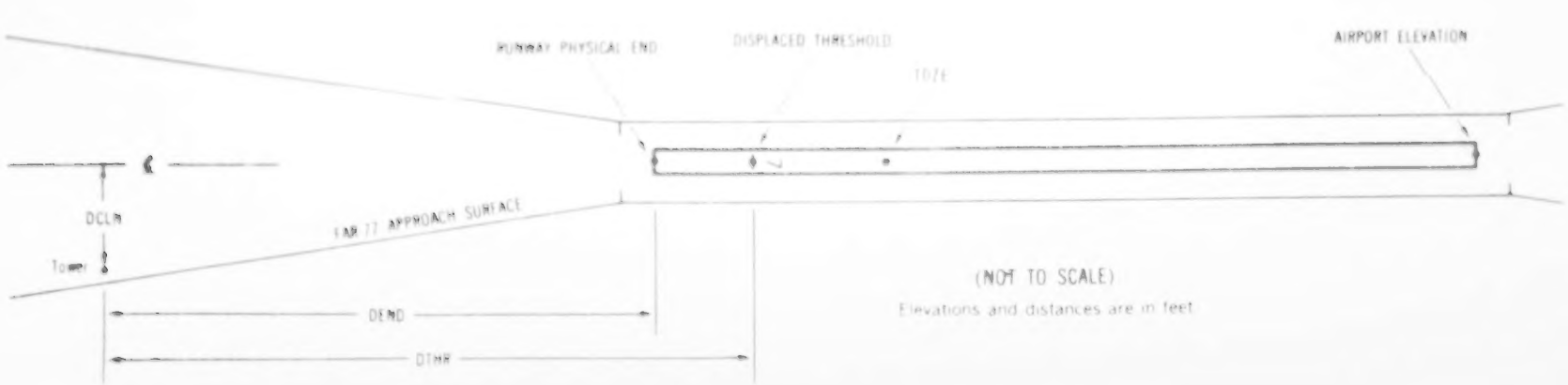

(NOT TO SCALE)

Elevations and distances are in feet

EXPLANATION OF FOOTNOTES

[1] Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.

[2] For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)

[3] Reference runway approach physical end elevation/touchdown zone elevation

[4] Latitude and longitude of reference runway approach physical end

[5] Reference runway geodetic azimuth reckoned clockwise from south

[6] Reference runway displaced threshold elevation/touchdown zone elevation

[7] Latitude and longitude of reference runway displaced threshold

[8] Accuracy Code:

Horizontal	Vertical
1 = 20	A = 2
2 = 40	B = 5
	C = 20

[9] Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.

[10] Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is ±10 feet.

[11] HAA - Height above airport
HAR - Height above reference runway approach physical end
HAT - Height above reference runway touchdown zone elevation

[12] DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end
DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold
DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.

A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.

[13] PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

OC5120

AIRPORT ELEVATION 63

7 SUPLC 63/ 335520.780N 1182032.762W 2664439 61/61 335521.325N 1182021.261W

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ROAD (N)	335523.66	1181932.10	1A	71		8	10	8	-5121	-4150	0L	13
OL LIGHT STANDARD	335524.76	1181932.65	1A	90		27	29	27	-5081	-4110	114L	32
OL BLAST FENCE	335523.11	1181933.00	1A	66		3	5	3	-5041	-4070	50R	8
TREE	335527.70	1181934.01	1A	119		56	58	56	-4983	-4012	417L	61
TREE	335519.99	1181934.08	1A	112		49	51	49	-4933	-3962	361R	54
SIGN	335522.41	1181935.51	1A	62		-1	1	-1	-4826	-3856	109R	4
TREE	335526.96	1181936.53	1A	106		43	45	43	-4766	-3796	355L	48
ROAD (N)	335525.14	1181937.29	1A	73		10	12	10	-4692	-3721	175L	14
ANTENNA ON BUILDING	335520.38	1181937.59	1A	87		24	26	24	-4640	-3669	304R	28
TREE	335526.68	1181938.42	1A	100		37	39	37	-4606	-3635	336L	41
TREE	335525.68	1181938.89	1A	81		18	20	18	-4560	-3590	237L	22
ROAD (N)	335525.30	1181939.67	1A	73		10	12	10	-4493	-3522	202L	14
TREE	335527.72	1181948.07	1A	118		55	57	55	-3800	-2829	487L	59
HANGAR	335520.42	1181947.74	1A	71		8	10	8	-3786	-2815	251R	12
OL WINDSOCK	335524.37	1181948.48	1A	82		19	21	19	-3747	-2776	150L	23
ROD ON OL RTR TOWER	335524.88	1181955.68	1A	104		41	43	41	-3143	-2173	236L	44
OL DOME	335517.62	1181957.99	1A	126		63	65	63	-2908	-1937	486R	66
POLE	335524.97	1182000.09	1A	97		34	36	34	-2773	-1802	266L	37
ANT & APBN ON OL CTL TR	335524.19	1182010.00	1A	135		72	74	72	-1934	-964	236L	76
ANTENNA ON OL HANGAR	335524.19	1182015.76	1A	110		47	49	47	-1450	-479	263L	50
TREE	335525.84	1182017.57	1A	130		67	69	67	-1307	-336	438L	70
LIGHT ON HANGAR	335523.62	1182021.47	1A	73		10	12	10	-967	4	233L	12
ROD ON BUILDING	335517.75	1182023.48	1A	120		57	59	57	-764	207	350R	59
TREE	335525.66	1182026.85	1A	122		59	61	59	-525	445	465L	60
VENT ON BUILDING	335517.44	1182026.75	1A	124		61	63	61	-486	484	365R	62
TREE	335525.61	1182030.83	1A	127		64	66	64	-190	780	478L	64
HANGAR	335523.79	1182032.81	1A	93		30	32	30	-13	958	304L	30
OL LOCALIZER	335520.78	1182032.83	1A	71		8	10	8	6	977	0L	8
POLE	335518.19	1182033.67	1A	100		37	39	37	92	1062	257R	37
ROAD (N)	335520.74	1182034.63	1A	76		13	15	13	158	1128	5L	13
POLE	335525.69	1182035.17	1A	125		62	64	62	174	1145	507L	62
FLAGPOLE ON BUILDING	335523.17	1182035.32	1A	95		32	34	32	202	1172	254L	32
SIGN	335519.92	1182035.30	1A	86		23	25	23	218	1189	75R	23

AIRPORT ELEVATION 63

7 SUPLC 63/ 335520.780N 1182032.762W 2664439 61/61 335521.325N 1182021.261W

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
ANTENNA ON BUILDING	335516.93	1182036.00	1A	105		42	44	42	294	1265	373R	39
POLE	335519.19	1182038.76	1A	101		38	40	38	514	1485	132R	29
ANTENNA ON BUILDING	335521.89	1182039.39	1A	98		35	37	35	551	1522	144L	25
TREE	335520.30	1182040.82	1A	118		55	57	55	681	1652	10R	41
POLE	335524.87	1182042.85	1A	117		54	56	54	826	1796	461L	36
TREE	335521.83	1182044.57	1A	129		66	68	66	987	1958	162L	43
TREE	335520.94	1182045.91	1A	119		56	58	56	1105	2076	79L	29
POLE	335521.96	1182050.16	1A	117		54	56	54	1457	2428	202L	17
POLE	335515.73	1182050.15	1A	116		53	55	53	1492	2463	427R	15
POLE	335524.86	1182050.78	1A	123		60	62	60	1492	2463	498L	22
TREE	335517.62	1182052.25	1A	128		65	67	65	1658	2629	226R	22
ANTENNA ON BUILDING	335516.55	1182101.35	1A	150		87	89	87	2429	3400	290R	21
POLE	335524.88	1182104.90	1A	149		86	88	86	2681	3652	568L	13

AIRPORT ELEVATION 63

25 PIR 58/ 335523.561N 1181934.051W 0864512 59/60 335523.301N 1181939.531W

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
SIGN	335519.92	1182035.30	1A	86		28	26	23	-5174	-4712	75L	23
FLAGPOLE ON BUILDING	335523.17	1182035.32	1A	95		37	35	32	-5157	-4695	254R	32
POLE	335525.69	1182035.17	1A	125		67	65	62	-5130	-4667	507R	62
ROAD (N)	335520.74	1182034.63	1A	76		18	16	13	-5113	-4651	5R	13
POLE	335518.19	1182033.67	1A	100		42	40	37	-5047	-4585	257L	37
OL LOCALIZER	335520.78	1182032.83	1A	71		13	11	8	-4962	-4499	0R	8
HANGAR	335523.79	1182032.81	1A	93		35	33	30	-4943	-4480	304R	30
TREE	335525.61	1182030.83	1A	127		69	67	64	-4765	-4303	478R	64
VENT ON BUILDING	335517.44	1182026.75	1A	124		66	64	61	-4469	-4007	365L	62
TREE	335525.66	1182026.85	1A	122		64	62	59	-4430	-3968	465R	60
ROD ON BUILDING	335517.75	1182023.48	1A	120		62	60	57	-4192	-3729	350L	59
LIGHT ON HANGAR	335523.62	1182021.47	1A	73		15	13	10	-3989	-3526	233R	12
TREE	335525.84	1182017.57	1A	130		72	70	67	-3649	-3186	438R	70
ANTENNA ON OL HANGAR	335524.19	1182015.76	1A	110		52	50	47	-3506	-3043	263R	50
A BN ON OL C TR	335524.19	1182010.00	1A	135		77	75	72	-3021	-2559	236R	76
POLE	335524.97	1182000.09	1A	97		39	37	34	-2182	-1720	266R	37
OL DOME	335517.62	1181957.99	1A	126		68	66	63	-2048	-1585	486L	66
ROD ON OL RTR TOWER	335524.88	1181955.68	1A	104		46	44	41	-1812	-1350	236R	44
OL WINDSOCK	335524.37	1181948.48	1A	82		24	22	19	-1209	-747	150R	23
HANGAR	335520.42	1181947.74	1A	71		13	11	8	-1170	-707	251L	12
TREE	335527.72	1181948.07	1A	118		60	58	55	-1156	-693	487R	59
ROAD (N)	335525.30	1181939.67	1A	73		15	13	10	-463	0	202R	14
TREE	335525.68	1181938.89	1A	81		23	21	18	-395	67	237R	22
TREE	335526.68	1181938.42	1A	100		42	40	37	-350	113	336R	41
ANTENNA ON BUILDING	335520.38	1181937.59	1A	87		29	27	24	-316	147	304L	28
ROAD (N)	335525.14	1181937.29	1A	73		15	13	10	-264	199	175R	14
TREE	335526.96	1181936.53	1A	106		48	46	43	-189	273	355R	48
SIGN	335522.41	1181935.51	1A	62		4	2	-1	-129	333	109L	4
TREE	335519.99	1181934.08	1A	112		54	52	49	-23	440	361L	54
TREE	335527.70	1181934.01	1A	119		61	59	56	27	490	417R	61
OL BLAST FENCE	335523.11	1181933.00	1A	66		8	6	3	85	548	50L	8
OL LIGHT STANDARD	335524.76	1181932.65	1A	90		32	30	27	125	588	114R	32
ROAD (N)	335523.66	1181932.10	1A	71		13	11	8	165	628	0R	13

AIRPORT ELEVATION 63

25 PIR 58/ 335523.561N 1181934.051W 0864512 59/60 335523.301N 1181939.531W

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
LIGHT STANDARD	335525.72	1181931.52	1A	89		31	29	26	226	688	205R	30
LIGHT STANDARD	335519.02	1181930.74	1A	65		7	5	2	252	715	474L	6
POLE	335524.85	1181928.30	1A	89		31	29	26	491	954	103R	25
FLOODLIGHT POLE	335525.79	1181926.79	1A	87		29	27	24	623	1086	190R	21
POLE	335524.87	1181925.53	1A	90		32	30	27	724	1187	92R	22
POLE	335528.97	1181924.23	1A	92		34	32	29	857	1319	499R	21
TREE	335530.78	1181919.25	1A	138		80	78	75	1286	1749	658R	58
CAMERA ON OL BUILDING	335527.46	1181917.91	1A	101		43	41	38	1381	1843	317R	19
OL BUILDING	335521.43	1181912.08	1A	125		67	65	62	1837	2299	320L	34
OL FLOODLIGHT POLE	335526.30	1181911.38	1A	128		70	68	65	1923	2386	168R	36
OL FLOODLIGHT POLE	335529.14	1181911.39	1A	127		69	67	64	1939	2401	455R	34
TREE	335532.33	1181910.63	1A	139		81	79	76	2021	2483	774R	45
TREE	335526.14	1181905.35	1A	137		79	77	74	2430	2892	123R	34
TREE	335533.56	1181903.57	1A	159		101	99	96	2623	3084	864R	53
POLE	335516.58	1181901.19	1A	145		87	85	82	2725	3188	861L	36
OL POLE	335524.75	1181900.13	1A	145		87	85	82	2860	3323	42L	34
TREE	335516.03	1181856.83	1A	156		98	96	93	3088	3551	938L	40
TREE	335529.34	1181855.08	1A	162		104	102	99	3312	3775	398R	42
TREE	335528.39	1181850.33	1A	182		124	122	119	3706	4168	279R	54
TREE	335526.05	1181846.03	1A	196		138	136	133	4055	4517	22R	61
TREE	335522.53	1181845.70	1A	201		143	141	138	4062	4525	334L	66
TREE	335514.81	1181839.89	1A	202		144	142	139	4507	4969	1141L	58
POLE	335536.70	1181840.22	1A	205		147	145	142	4604	5066	1069R	59
TREE	335521.50	1181830.67	1A	236		178	176	173	5321	5784	510L	76
POLE	335526.99	1181828.71	1A	224		166	164	161	5517	5980	35R	60
POLE	335539.51	1181828.63	1A	254		196	194	191	5595	6058	1298R	88
OL ON TRANSMISSION TOWER	335533.18	1181825.93	1A	275		217	215	212	5786	6249	646R	105
POLE	335523.13	1181819.96	1A	235		177	175	172	6231	6694	396L	56
TRANSMISSION TOWER	335535.13	1181809.69	1A	275		217	215	212	7163	7626	766R	78
TREE	335529.45	1181800.59	1A	281		223	221	218	7897	8360	149R	69
TRANSMISSION TOWER	335530.17	1181757.08	1A	294		236	234	231	8197	8659	205R	76
TREE	335528.67	1181727.79	1A	278		220	218	215	10653	11115	86L	9

OC5120

AIRPORT ELEVATION 63

ARP 335522.171N 1182003.406W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
OL ANTENNA ON BUILING	335512.44	1181956.46	1A	149		86	135 20	1145
ANTENNA ON BUILDING	335513.19	1182014.46	1A	176		113	211 50	1301
ANTENNA ON BUILDING	335516.08	1181944.92	1A	129		66	97 39	1675
OL ON BUILDING	335517.97	1181936.98	1A	119		56	86 54	2267
GUARD RAIL	335529.33	1181934.31	1A	88		25	59 40	2556
OL ON BUILDING	335516.41	1181933.28	1A	119		56	89 1	2605
POLE	335526.70	1182035.26	1A	140		77	265 47	2723
POLE	335518.36	1181930.69	1A	95		32	84 3	2784
BILLBOARD	335514.63	1182035.28	1A	102		39	240 16	2792
POLE	335510.34	1182035.27	1A	133		70	232 6	2940
TREE	335534.17	1181931.58	1A	138		75	51 45	2944
TREE	335534.30	1181927.59	1A	137		74	54 0	3258
OL BUILDING	335516.19	1181923.75	1A	102		39	86 21	3396
TREE	335530.72	1181923.17	1A	133		70	61 48	3499
TREE	335532.74	1181919.17	1A	144		81	60 7	3877
ANTENNA ON BUILDING	335550.29	1181927.30	1B	209		146	33 3	4164
OL TANK	335505.32	1182124.85	1B	225		162	242 10	7072
OL WATER TANK	335409.87	1182017.01	1B	196		133	175 1	7398
ANTENNA	335634.01	1181912.02	1B	278		215	16 54	8455
POLE	335550.96	1181827.79	1B	287		224	56 14	8567
BUILDING	335650.97	1182017.00	1B	241		178	338 50	9049
POLE	335607.26	1181828.60	1B	269		206	46 23	9198
ANTENNA ON BUILDING	335547.25	1181816.33	1B	303		240	60 24	9372
TREE	335638.87	1181855.75	1B	267		204	22 25	9623
BELL TOWER	335657.50	1181931.13	1B	278		215	1 52	10013
OL TANK	335442.21	1182154.09	1B	217		154	232 42	10165
SPIRE	335618.57	1181823.24	1B	276		213	42 3	10185
CROSS ON CHURCH	335550.15	1181804.88	1B	325		262	60 17	10381
POLE	335629.19	1181828.63	1B	300		237	35 47	10473
FLAGPOLE	335614.25	1181810.18	1B	317		254	47 12	10896
TRANSMISSION TOWER	335507.06	1181752.43	1B	269		206	83 58	11143
TRANSMISSION TOWER	335648.80	1181839.89	1B	358		295	24 53	11234
TREE	335712.91	1181928.41	2C	267		204	0 51	11576

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AIRPORT ELEVATION 63

ARP 335522.171N 1182003.406W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
ANTENNA ON BUILDING	335456.65	1182230.06	1B	239		176	244 19	12625
TRANSMISSION TOWER	335506.78	1181734.60	1B	294		231	83 10	12637
TRANSMISSION TOWER	335452.91	1181734.58	2C	255		192	89 21	12886
TRANSMISSION TOWER	335648.77	1181803.36	2C	312		249	35 13	13377
OL ANTENNA ON BUILDING	335645.26	1182207.40	2C	277		214	294 54	13405

TOUCHDOWN ZONE RUNWAY	ELEVATION
7	61
25	60

HAWTHORNE MUNICIPAL AIRPORT

HAWTHORNE, CALIFORNIA

(NOT TO SCALE)